

**TEMPLATE: Example Ingredients and Recipe/ Methods** (adapted from Consumer Protection Program San Francisco, CA)**Ingredients:**

Extra fancy (short grain) rice: 7 lbs  
 Water: 8 lbs.  
 Distilled white vinegar (4 % acidity): 15 oz.  
 Sugar: 12 oz.  
 Salt: 5 oz.

**Equipment:**

Rice cooker  
 Digital thermometer pH meter  
 pH meter Log sheets  
 Log sheets

**Pre-preparation:**

1. Assemble all ingredients and equipment.
2. Verify rice cooker clean and in good repair because dirty or damaged equipment can harbor bacteria and lead to foodborne illness.
3. Add 7 lbs. rice to pot, and wash rice by agitating with clean gloved hands three times, partially fill pot each time and visually inspect rice for physical contaminants and remove any debris that may be present and drain water.
4. Add 8 lbs. from a potable water source taking into account the water added during the washing process. So, the total weight of rice and water is 15 lbs.

**Preparation:**

5. Put the rice into the rice cooker until rice is thoroughly cooked, approximately 30 minutes. The rice will boil at 212 degrees F. Be sure not to lift the lid during the cooking process. When the rice is cooked, the "keep warm" light will be on. The rice now is pasteurized, and all vegetative pathogens are reduced to a safe level. Spores for *Bacillus cereus* survive.
6. While the rice is cooking, combine the distilled white vinegar, sugar, and salt into a small stainless-steel pot and heat the mixture until the sugar has dissolved (about 160 degrees F), stirring constantly, remove from heat, and set aside.
7. Use a spatula to empty the rice cooker and put it into a large stainless-steel container or baking sheet, need to be sure the rice container is clean and in good repair. Layer of rice in container cannot be greater than two inches in depth. Spread the rice evenly over the bottom with a stainless-steel spoon. Placing rice in a larger container speeds the cooling process and makes it easier to mix the vinegar mixture into the rice.
8. Run a spatula through the rice (about 80 degrees F) using right and left slicing motions to separate the grains. At the same time, slowly add about 32 oz. vinegar mixture (about 80 degrees F). Make sure all rice is evenly coated with vinegar mixture so that all rice reaches the appropriate pH (less or equal to 4.1) 32 oz. of vinegar mixture is added to acidify the rice and add flavor. More vinegar mixture may be added if target pH (less or equal to 4.1) is not reached. Let cool to room temperature (about 30 minutes).
9. Check the pH of the rice mixture by using a calibrated pH meter. The pH must be 4.1 or less to prevent the growth of *Bacillus Cereus*. If it is above the required range, add more vinegar mixture to it and repeat steps 7 and 8 and record the reading in the corrective action of the sushi rice pH log. The rice does not need to be refrigerated, because it is at a safe pH and is no longer a time/temperature control for safety (TC) food. Keep covered to prevent drying. Sushi rice quality can last up to eight hours. After eight hours the sushi rice must be discarded.

## SUSHI FISH GUIDELINES

Parasites in fish are a risk factor associated with sushi. To kill the parasites, most fish must be frozen at either:

- **≤ - 4 degrees F for 7 days,**
- **≤ - 31 degrees F for 15 hours or**
- **≤ - 31 degrees F until solid and then stored at ≤ -20 degrees F for 24 hours**

The fish can be purchased frozen from the supplier. In that case, a document is supplied by the vendor that states the fish is frozen for parasite destruction. **The record must remain on the premises for 90 days.**

Otherwise, establishments can buy the raw fish and freeze the fish themselves if the freezer can maintain the required temperature and a record is kept to prove the length of time the fish is frozen. **The documentation must be kept for 90 days.** A Frozen Fish Log template is attached below.

Large tunas are considered parasite free and can be purchased raw without being frozen. Certain aquacultured fish, such as salmon, may also be parasite free. The supplier must stipulate in writing that the fish meets certain requirements that deem it free from parasites. **Those records must also be kept for 90 days.**

**Species of large tuna that are considered free of parasites include:**

Albacore, Yellowfin, Blackfin, Bluefin, Bigeye, Longtail, and Karasick.

**Fluke, Grouper, Jack, Bass, Trout, small Tuna, and Salmon (aquacultured and wild) may contain parasites and should be frozen for parasite destruction.** As mentioned, certain aquacultured salmon may be certified parasite free from vendor. Without such documentation, the farm raised salmon must be frozen to kill potential parasites.

### Frozen Fish Log

For in house parasite destruction, must maintain temperature of -4 degrees F for at least seven days.

Type of Fish	Day	Date	Temperature (degrees F)	Initials
	1			
	2			
	3			
	4			
	5			
	6			
	7			